



## CERTIFICATE OF ANALYSIS

PRODUCT NAME:	THROMBIN BOVINE High Purity
CAS NO:	9002-04-4
CAT. NO:	I528-50H
EC NO:	3.4.21.5
FORM:	Lyophilized
MOLECULAR WEIGHT:	36,000
SPECIFIC ACTIVITY:	Greater than 2000 NIH units/mg protein
STORAGE:	-20C

Our High Specific Activity Bovine Thrombin product is used to cleave r-fusion proteins containing a thrombin site for removal of affinity tags as well as certain diagnostic pharmaceutical applications.

bovine Thrombin EC 3.4.21.5 (activated Factor II) is a coagulation protein that has many effects in the coagulation cascade. Bovine Thrombin is a serine protease that converts fibrinogen into fibrin.

Bovine Thrombin used as a reagent, Thrombin has proven useful in the laboratory evaluation of many fibrinogen(s)

Our customers use Bovine Thrombin to defibrinate human plasma, producing serum matrixes to be used as controls and standards around the world.

Thrombin promotes chemotaxis in monocytes, neurite retraction in neuron Thrombin serves as a potent mitogenic agent in fibroblast growth and functions as a serum-free media component for several cell lines

Bovine Thrombin is a multifunctional proteolytic<sup>1</sup> enzyme which acts both specifically and non-specifically with several proteins, cells, surfaces, and other molecules. Bovine Thrombin(s) essential role in the clotting process has been well characterized where it converts fibrinogen, a soluble plasma glycoprotein, to an insoluble protein gel called fibrin, the essential component of the blood clot.

Bovine Thrombin is a clotting enzyme that is a serine protease which cleaves Arginine-Glycine bonds in fibrinogen to give clots of fibrin & fibrinpeptide A and B. Bovine Thrombin is derived from bovine prothrombin which is isolated from bovine plasma. Bovine prothrombin is treated with bovine lung thromboplastin to yield Bovine Thrombin.